

What is claimed is:

1. A control unit of the vehicle generator comprising:

a vehicle generator;

a battery adapted to be charged by an output of said vehicle generator;

a control circuit having an on-off control switching section for controlling the turning on and off of a field current of said vehicle generator, said control circuit being operable to interrupt said on-off control switching section when a detected voltage of said battery is higher than a reference voltage, and make said on-off control switching section conductive thereby to control the voltage of power generation at a predetermined voltage when the detected voltage of said battery is below said reference voltage;

a power generation stop circuit having an off detection circuit for detecting turning off of a key switch of a vehicle, said power generation stop circuit being operable to stop the power generation of said vehicle generator when said off detection circuit detects the turning off of said vehicle key switch; and

a power generation stop terminal for interrupting said on-off control switching section;

wherein said power generation stop circuit controls said power generation stop terminal to stop the power generation of said vehicle generator instantaneously when said off detection circuit detects the turning off of said vehicle key switch.

2. The control unit of a vehicle generator according to claim 1, wherein said power generation stop circuit comprises a grounding switching section which is operated based on an off detection signal from said off detection circuit to ground said power generation stop terminal.

3. A control unit of a vehicle generator comprising:

a vehicle generator;

a battery adapted to be charged by an output of said vehicle generator;

a control circuit having an on-off control switching section for controlling the turning on and off of a field current of said vehicle generator, said control circuit being operable to interrupt said on-off control switching section when a detected voltage of said battery is higher than a reference voltage, and make said on-off control switching section conductive thereby to control the voltage of power generation at a predetermined voltage when the detected voltage of said battery is below said reference voltage; and

a power generation stop circuit having an off detection circuit for detecting the turning off of a key switch of a vehicle, said power generation stop circuit being operable to stop the power generation of said vehicle generator when said off detection circuit detects the turning off of said vehicle key switch;

wherein said control circuit has a connection state detecting portion for stopping power generation when it becomes impossible to detect the voltage of said battery; and

wherein said power generation stop circuit controls a voltage sensing terminal, which detects the voltage of said battery, to stop power generation when said off detection circuits the turning off of said vehicle key switch.

4. The control unit of a vehicle generator according to claim 3, wherein said power generation stop circuit interrupts said voltage sensing terminal from said battery to disable the detection of the voltage of said battery thereby to instantaneously stop power generation by means of a switching section which is operated based on an off detection signal of said off

detection circuit indicative of the turning off of said vehicle key switch.

5. The control unit of a vehicle generator according to claim 3, wherein said power generation stop circuit acts to ground said voltage sensing terminal to disable the detection of the voltage of said battery thereby to instantaneously stop power generation by means of a switching section which is operated based on an off detection signal of said off detection circuit indicative of the turning off of said vehicle key switch.

6. The control unit of a vehicle generator according to claim 3, wherein said power generation stop circuit comprises a grounding circuit for grounding an output terminal, which supplies a field current to said field coil, after the lapse of a predetermined period of time from the instant when a voltage sensing terminal, which detects the voltage of said battery, is controlled to stop power generation.